6AN8
MEDIUM-MU TRIODE—SHARP-CUTOFF PENTODE

9-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:			
Voltage (AC or DC)	6.3 ± 10%		volts
Current	0.45		amp
Direct Interelectrode Capacitances:[o]			
Triode Unit:			
Grid to plate	1.5		μμf
Grid to cathode and heater	2		μμf
Plate to cathode and heater	0.26		μμf
Pentode Unit:			
Grid No.1 to plate	0.04	max.	μμf
Grid No.1 to cathode & grid No.3 & internal shield, grid No.2, and heater	7		μμf
Plate to cathode & grid No.3 & internal shield, grid No.2, and heater	2.4		μμf
Triode grid to pentode plate	0.02	max.	μμf
Pentode grid No.1 to triode plate	0.02	max.	μμf
Pentode plate to triode plate	0.15	max.	μμf

Characteristics, Class A_1 Amplifier:

	Triode Unit	*Pentode Unit*	
Plate Supply Voltage	150	125	volts
Grid-No.2 Supply Voltage	–	125	volts
Grid-No.1 Voltage	-3	0	volts
Cathode Resistor	0	56	ohms
Amplification Factor	21	–	
Plate Resistance (Approx.)	4700	170000	ohms
Transconductance	4500	7800	μmhos
Plate Current	15	12	ma
Grid-No.2 Current	–	3.8	ma
Grid-No.1 Voltage (Approx.) for plate μa = 20	-17	-6	volts
Grid-No.1 Voltage (Approx.) for plate ma. = 1.6, and cathode resistor (ohms) = 0	–	-3	volts

Mechanical:

Operating Position	Any
Maximum Overall Length	2-3/16"
Maximum Seated Length	1-15/16"
Length, Base Seat to Bulb Top (Excluding tip)	1-9/16" ± 3/32"
Diameter	0.750" to 0.875"
Dimensional Outline	*See General Section*

←Indicates a change.

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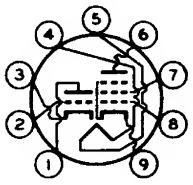
MEDIUM-MU TRIODE–SHARP-CUTOFF PENTODE

Bulb. T6-1/2
Base. . . . . .Small-Button Noval 9-Pin (JEDEC No.E9-1)
Basing Designation for BOTTOM VIEW. 9DA

Pin 1 – Triode Plate
Pin 2 – Triode Grid
Pin 3 – Triode Cathode
Pin 4 – Heater
Pin 5 – Heater
Pin 6 – Pentode Plate
Pin 7 – Pentode Grid No.2
Pin 8 – Pentode Grid No.1
Pin 9 – Pentode Grid No.3, Pentode Cathode, Internal Shield



AMPLIFIER — Class A_1

Maximum Ratings, *Design-Maximum Values:*

	Triode Unit		*Pentode Unit*		
PLATE VOLTAGE.	330	max.	330	max.	volts
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE	–		330	max.	volts
GRID-No.2 VOLTAGE.	–		*See Grid-No.2 Input Rating Chart at front of Receiving Tube Section*		
GRID-No.1 (CONTROL-GRID) VOLTAGE: Positive-bias value.	0	max.	0	max.	volts
GRID-No.2 INPUT: For grid-No.2 voltages up to 165 volts.	–		0.55	max.	watt
For grid-No.2 voltages between 165 and 330 volts.	–		*See Grid-No.2 Input Rating Chart at front of Receiving Tube Section*		
PLATE DISSIPATION.	2.8	max.	2.3	max.	watts
PEAK HEATER-CATHODE VOLTAGE: Heater negative with respect to cathode	200	max.	200	max.	volts
Heater positive with respect to cathode	200▲	max.	200▲	max.	volts

Maximum Circuit Values:

	Triode Unit		*Pentode Unit*		
Grid-No.1-Circuit Resistance:*					
For fixed-bias operation . .	0.5	max.	0.25	max.	megohm
For cathode-bias operation .	1	max.	1	max.	megohm

○ Without external shield.
▲ The dc component must not exceed 100 volts
* If either unit is operated at maximum rated conditions, grid-No.1-circuit resistances for both units should not exceed the stated values.

→ Indicates a change.

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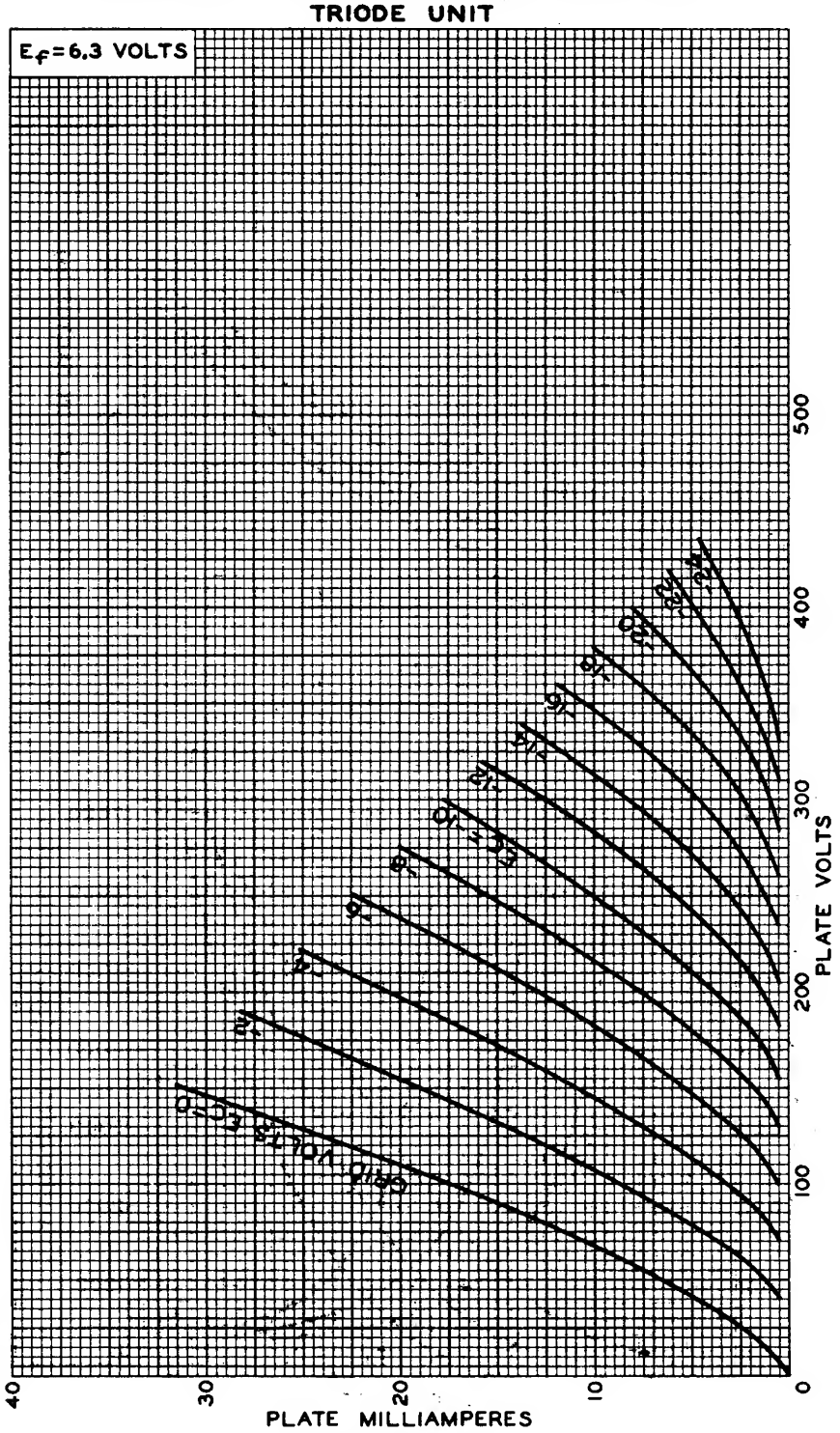
AVERAGE PLATE CHARACTERISTICS

TRIODE UNIT



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92CM-8209

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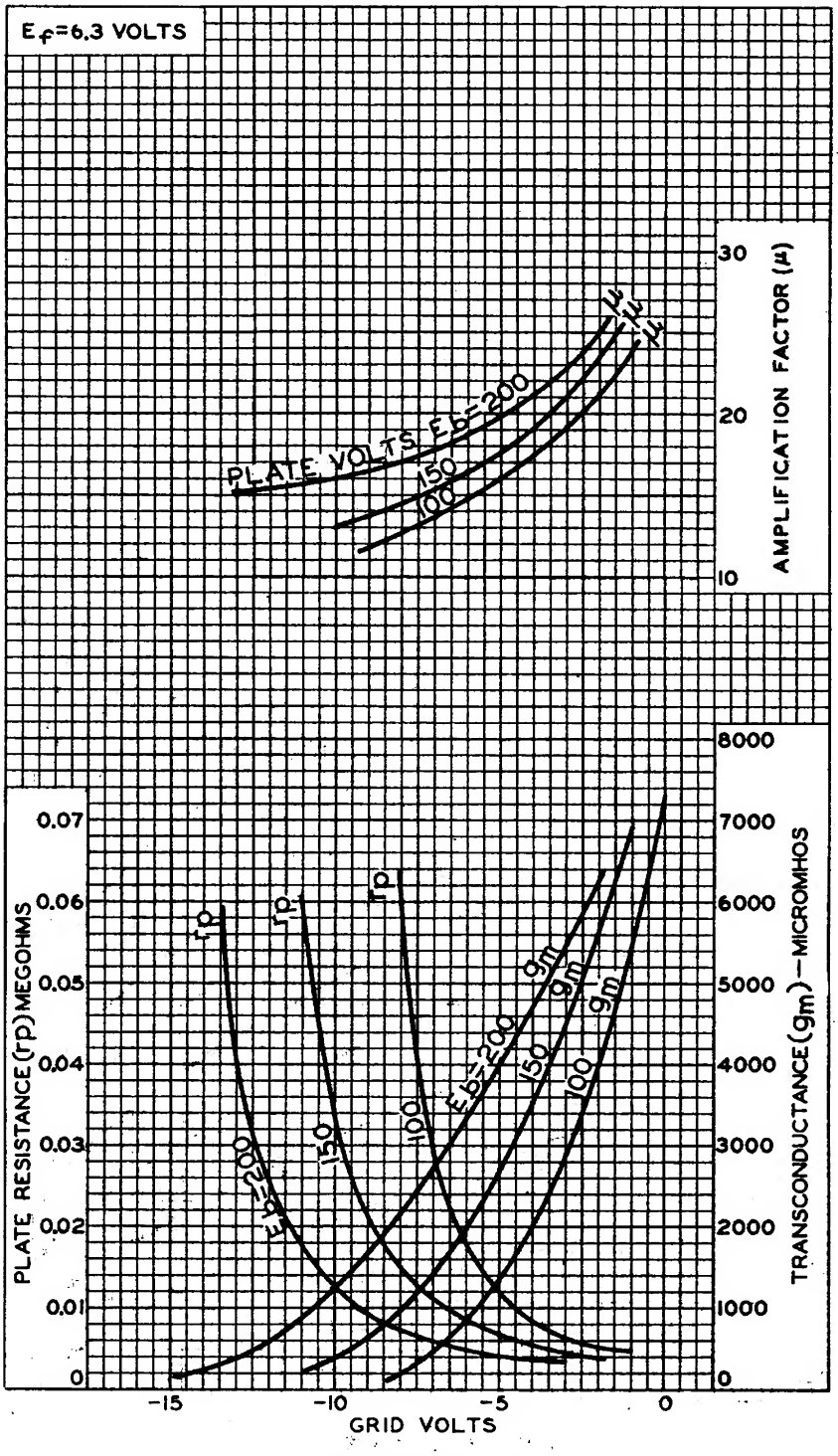
AVERAGE CHARACTERISTICS
TRIODE UNIT



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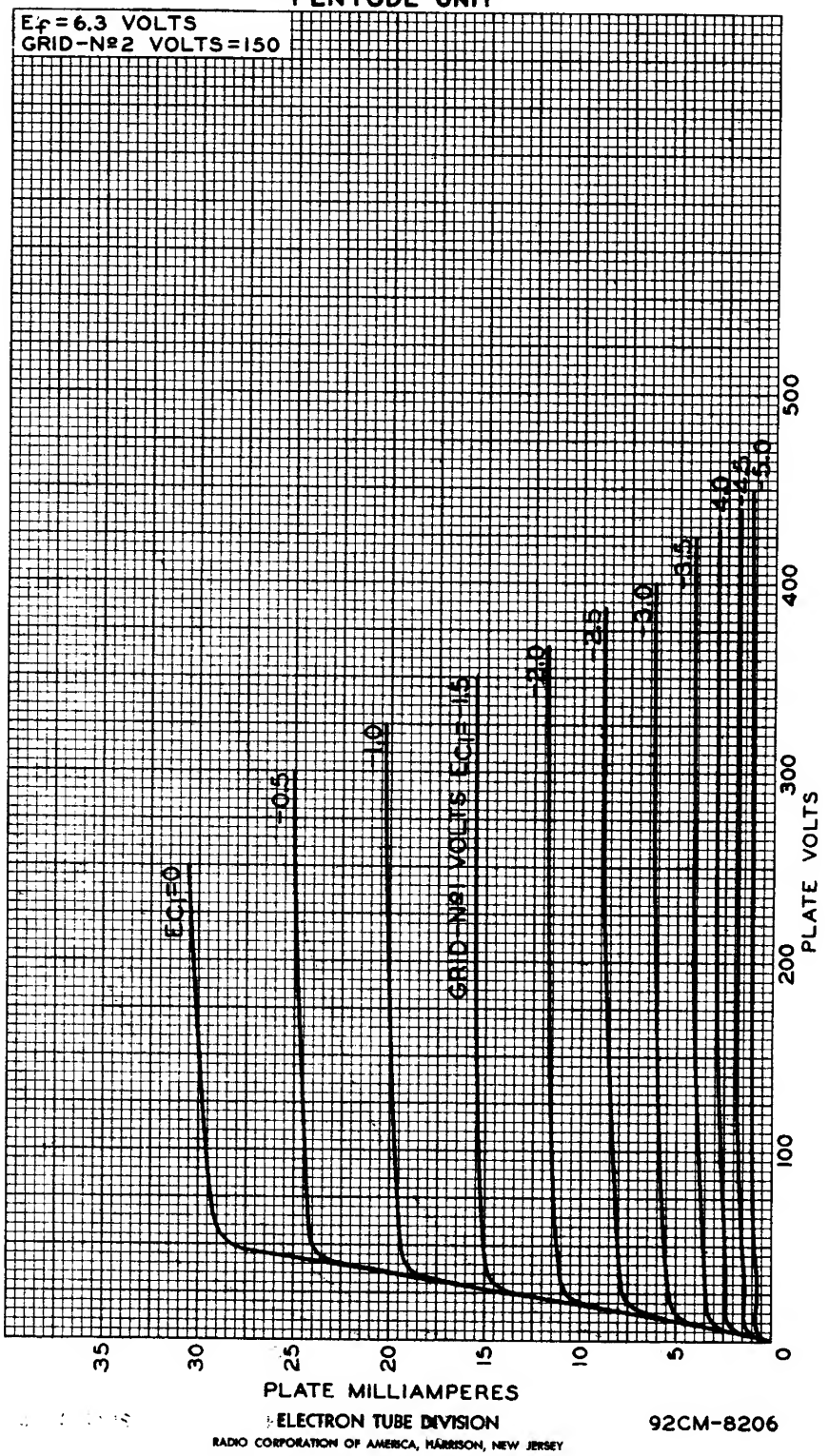
AVERAGE PLATE CHARACTERISTICS

PENTODE UNIT



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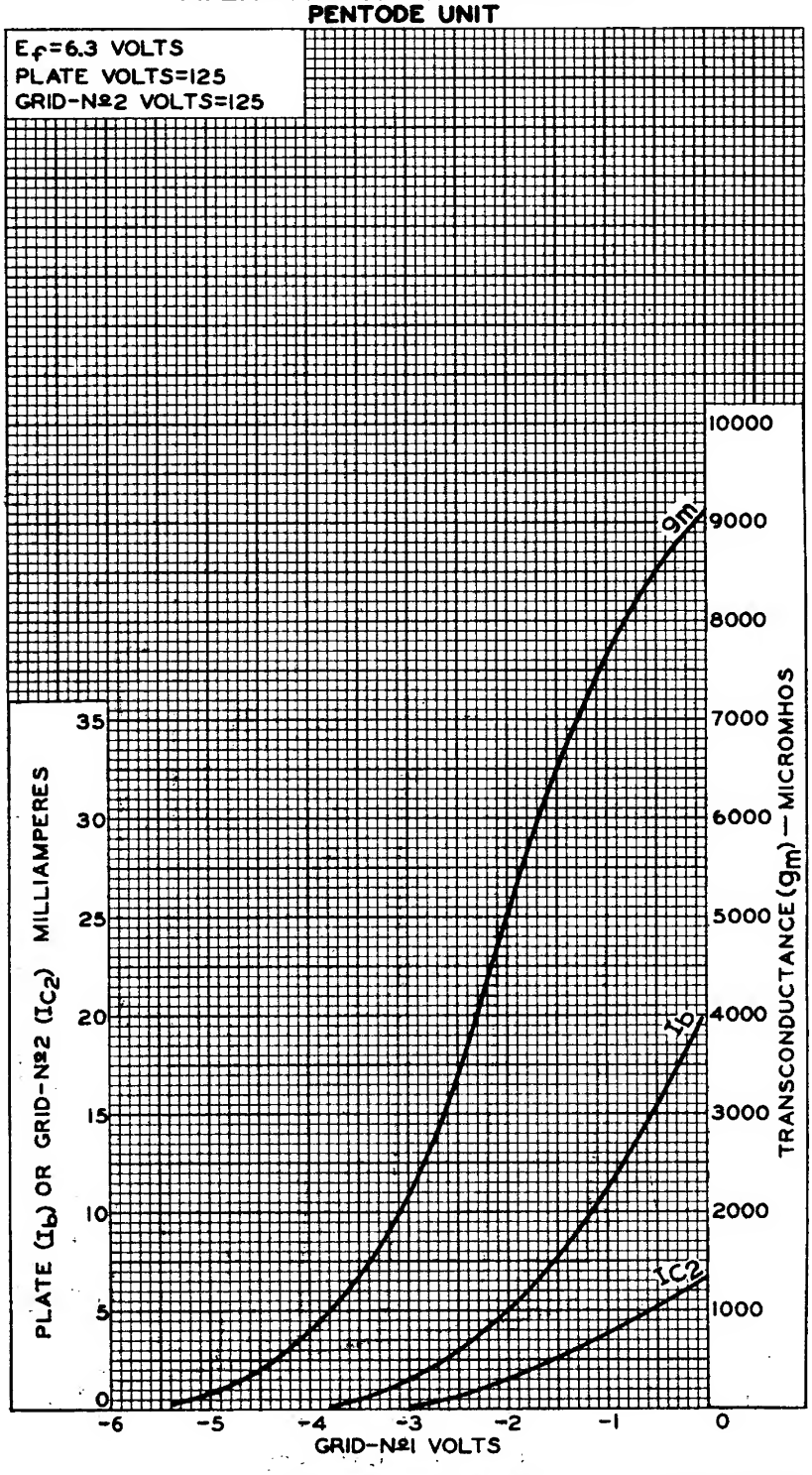
AVERAGE CHARACTERISTICS

PENTODE UNIT



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